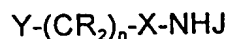


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ART 84 AMDTCLAIMS

1. A compound of formula:



5 where:

X is C=O or CR<sub>2</sub>;

n is an integer of value 1 to 6;

Y is L(A)<sub>m</sub>- or R<sup>1</sup>R<sup>2</sup>CR- where L is a metal complexing agent,

A is -CR<sub>2</sub>-, -CR=CR-, -C≡C-, -NRCO-, -CONR-, -SO<sub>2</sub>NR-,

10 -NRSO<sub>2</sub>-, -CR<sub>2</sub>OCR<sub>2</sub>-, -CR<sub>2</sub>SCR<sub>2</sub>-, -CR<sub>2</sub>NRCR<sub>2</sub>-, a C<sub>4-8</sub>

cycloheteroalkylene group, a C<sub>4-8</sub> cycloalkylene group, a C<sub>5-12</sub> arylene

group, a C<sub>3-12</sub> heteroarylene group or a polyalkyleneglycol, polylactic acid  
or polyglycolic acid moiety;

m is an integer of value 0 to 10;

15 where one of R<sup>1</sup> and R<sup>2</sup> is -NH(B)<sub>p</sub>Z<sup>1</sup> and the other is  
-CO(B)<sub>q</sub>Z<sup>2</sup> where

p and q are integers of value 0 to 45, and

each B is independently chosen from Q or an amino acid  
residue,

20 where Q is a cyclic peptide;

Z<sup>1</sup> and Z<sup>2</sup> are protecting groups;

J and each R group are independently chosen from H, C<sub>1-4</sub>  
alkyl, C<sub>1-4</sub> alkenyl, C<sub>1-4</sub> alkynyl, C<sub>1-4</sub> alkoxyalkyl or C<sub>1-4</sub> hydroxyalkyl;  
with the provisos that:

25 (i) the total number of amino acid residues in the R<sup>1</sup> and R<sup>2</sup>  
groups does not exceed 45;

(ii) when X is CR<sub>2</sub>, then Y is -CRR<sup>1</sup>R<sup>2</sup> and Z<sup>2</sup> is a metal  
complexing agent;

(iii) when Y is -CRR<sup>1</sup>R<sup>2</sup> then at least one of R<sup>1</sup> and R<sup>2</sup> bears at  
30 least one detectable moiety.

2. The compound of claim 1 where  $R^1$  or  $R^2$  includes one or more peptide fragments of  $\alpha_2$ -antiplasmin, fibronectin, beta-casein, tetanus, amyloid, trappin and polyglutamine residues, said peptide fragment containing at least three amino acid residues.

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3. The compound of claim 2 where the peptide fragment is from  $\alpha_2$ -antiplasmin.

4. The compound of claim 3 where the amino acid in the 2-  
10 position from the peptide N-terminus is glutamine.

5. The compound of ~~claims 1 to 4~~ <sup>Claim 1</sup> where J is H.

6. The compound of claim 5 of formula:  
15  $Y-(CR_2)_x-(CH_2)_2CONH_2$  or  $Y-(CR_2)_y-(CH_2)_4NH_2$   
where x is an integer of value 0 to 4, and y is an integer of value 0 to 3.

7. The compound of ~~any one of claims 1 to 6~~ <sup>Claim 1</sup> where Y is  $-CRR^1R^2$ .

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8. The compound of ~~any one of claims 1 to 7~~ <sup>Claim 1</sup> where at least one of  $Z^1$  and  $Z^2$  is a metal complexing agent.

9. The compound of claim 8 where  $Z^2$  is a metal complexing agent and  $Z^1$  is not a metal complexing agent.  
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10. A metal complex of the compounds of claim 8 ~~or claim 9~~.

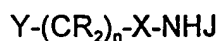
11. The metal complex of claim 10 where the metal is a  
30 radiometal.

12. The radiometal complex of claim 11 where the radiometal is  $^{99m}\text{Tc}$ .

13. A preparation for human administration comprising the compound of ~~any one of claims 1 to 12.~~

14. ~~A kit comprising the compound of any one of claims 1 to 9 useful in the preparation of the metal complexes of any one of claims 10 to 12.~~

15. Use for the diagnosis of sites of thrombosis or embolism of a compound of formula:



where:

- 15 X is C=O or CR<sub>2</sub>;  
 n is an integer of value 1 to 6;  
 Y is L(A)<sub>m</sub>- or R<sup>1</sup>R<sup>2</sup>CR- where L is a metal complexing agent,  
 A is -CR<sub>2</sub>-, -CR=CR-, -C≡C-, -NRCO-, -CONR-, -SO<sub>2</sub>NR-,  
 -NRSO<sub>2</sub>-, -CR<sub>2</sub>OCR<sub>2</sub>-, -CR<sub>2</sub>SCR<sub>2</sub>-, -CR<sub>2</sub>NRCR<sub>2</sub>-; a C<sub>4-8</sub>  
 20 cycloheteroalkylene group, a C<sub>4-8</sub> cycloalkylene group, a C<sub>5-12</sub> arylene  
 group, a C<sub>3-12</sub> heteroarylene group or a polyalkyleneglycol, polylactic acid  
 or polyglycolic acid moiety;  
 m is an integer of value 0 to 10;  
 where one of R<sup>1</sup> and R<sup>2</sup> is -NH(B)<sub>p</sub>Z<sup>1</sup> and the other is  
 25 -CO(B)<sub>q</sub>Z<sup>2</sup> where  
 p and q are integers of value 0 to 45, and  
 each B is independently chosen from Q or an amino acid  
 residue,  
 where Q is a cyclic peptide;  
 30 Z<sup>1</sup> and Z<sup>2</sup> are protecting groups;

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J and each R group are independently chosen from H, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkenyl, C<sub>1-4</sub> alkynyl, C<sub>1-4</sub> alkoxyalkyl or C<sub>1-4</sub> hydroxyalkyl; with the provisos that:

- (i) the total number of amino acid residues in the R<sup>1</sup> and R<sup>2</sup> groups does not exceed 45;
- (ii) when X is CR<sub>2</sub>, then Y is -CRR<sup>1</sup>R<sup>2</sup>;
- (iii) when Y is -CRR<sup>1</sup>R<sup>2</sup> then at least one of R<sup>1</sup> and R<sup>2</sup> bears at least one detectable moiety.
- 10 16. Use for the diagnosis of sites of thrombosis or embolism of a radiometal complex of the compound defined in claim 13, wherein at least one of Z<sup>1</sup> and Z<sup>2</sup> is a metal complexing agent.
- 15 17. A peptide fragment of  $\alpha_2$ -antiplasmin, fibronectin, beta-casein, tetanus, amyloid, trappin or polyglutamine, said peptide fragment containing 3 – 45 amino acid residues and carrying a terminal metal complexing agent.
- 20 18. The peptide fragment of claim 17, wherein the metal complexing agent is at the carboxy terminus.

19. A metal complex of the peptide fragment of claim 17 ~~or claim 18.~~